



# Postgraduate Certificate Management of Urology and Reproductive Emergencie in Small Animals

» Modality: online

» Duration: 2 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: techtitute.com/pk/veterinary/postgraduate-certificate/management-urology-reproductive-emergencias-small-animals

## Index

> 06 Certificate

> > p. 28

## 01 Introduction

Urologic and reproductive emergencies are some of those that require more specific expertise for the rapid and accurate examination and diagnosis they require. This complete program will present all the necessary protocols to carry it out effectively. A comprehensive program that will propel you to the highest level of competence through the most effective teaching systems in the online teaching market.



## tech 06 | Introduction

In emergency medicine there is a series of understandings, procedures and techniques which are common in the majority of cases, independent of the specialty or specialties involved in each case

This Postgraduate Certificate can be divided into three different areas. On the one hand, pathologies affecting the kidney, such as renal lithiasis or acute renal failure, on the other hand, the urinary tract, with pathologies such as cystitis or urethral obstruction, and finally the reproductive system, both male and female.

Although part of the reproductive and urinary system is common to both systems in clinical practice, the emergencies of both systems do not have many aspects in common, as will be seen in the development of the University Course.

This module will cover the care of a patient with nephrourological and/or reproductive emergencies from arrival at the emergency department, initial stabilization, as well as anamnesis, examination, complementary tests and medical treatment.

In short, we offer you a complete tour of all the areas of knowledge you need to provide quality emergency care.

The topics and clinical cases proposed, as well as their resolution, are based on the practical experience of the teachers and on the cases most frequently seen in emergency veterinary services.

All information is presented through high-quality multimedia content, analysis of clinical cases prepared by teachers, master classes and video techniques that allow the exchange of knowledge and experience, maintain and update the skill level of learning of its members, create protocols for action and disseminate the most important developments in the emergencies within medicine of small animals.

This online postgraduate Certificate offers you the characteristics of a high-level scientific, teaching and technological program. These are some of its most notable features:

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practising experts
- State-of-the-art interactive video systems.
- Teaching supported by telepractice
- Continuous updating and recycling systems
- · Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification
- Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- · Communication with the teacher and individual reflection work
- Availability of content from any fixed or portable device with internet connection
- Supplementary documentation databases are permanently available, even after the Postgraduate Certificate



Achieve a complete Learning in all aspects of intervention in Urology and Reproductive Emergencies through this highly effective Postgraduate Certificate".

## Introduction | 07 tech



A Postgraduate Certificate that will enable you to face different situations with safety and therapeutic success".

Our teaching staff is made up of professionals from different fields related to this specialty. In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of qualified and experienced professionals in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at the service of the University Course the practical knowledge derived from their own experience: one of the differential qualities of this program.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your learning.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

A high intensity Postgraduate Certificate that will take you through different teaching approaches to allow you to learn in a dynamic and effective way.

Our innovative telepractice concept will provide you with faster integration and a much more realistic view of the content:

"learning from an expert.







## tech 10 | Objectives



## **General Objectives**

- Acquire knowledge and fundamental skills related to the initial attention of the patient and the necessary diagnostic and therapeutic procedures in the most common emergency situations.
- Gain a deeper understanding of the most appropriate medical-surgical techniques for patients with nephrological, urological and/or reproductive problems.



A path to achieve specialization and professional growth that will propel you towards a greater level of competitiveness in the employment market".





## **Specific Objectives**

#### Module 1.

- Perform the correct triage of patients who arrive at the emergency department
- Assess, manage and provide primary care to patients in the emergency

#### Module 2.

- Perform and interpret the routine tests in a nephrology, urology or reproductive medicine consultation such as a vaginal cytology, urinary sediment examination, abdominal ultrasound, urinalysis, etc.
- Perform a presumptive and differential diagnosis based on the data from the physical examination, laboratory tests and diagnostic imaging tests.
- Apply the most appropriate treatment and therapies in the treatment of patients with emergency nephrologic, urologic and/or reproductive problems.
- Perform medical-surgical techniques to stabilize patients with genitourinary problems such as urethral catheterization in patients with urethral obstruction or cystocentesis







## tech 14 | Course Management

#### Management



#### Dr. Quintana Diez, Germán

- PhD in Veterinary Medicine from the USC
- Degree in Veterinary Medicine from the USC
- Coordinator of the Dermatology and Behavioral Medicine Services at the Polyclinic A Marosa Veterinary Center
- Master's Degree in Small and Exotic Animals from UCM
- Master's Degree in Clinical Etiology and Animal Welfare from UCM
- Specialist Degree in Medical Genetics and Genomics from UCAM
- Member of the European Society of Veterinary Dermatology
- Member of the European Society of Clinical Veterinary Ethology
- Member of the Spanish Association of Veterinarians of Pet Animals and member of the AVEPA internal medicine, dermatology and clinical etiology study groups

#### **Professors**

#### Beceiro Hermida, Óscar

- Head of Kavuré Veterinary Hospital
- Degree and Advanced Study Diploma in Veterinary Medicine from the USC
- Master's Degree in Animal Behavior and welfare from UZ
- Postgraduate Degree in Behavioral Medicine and Animal Welfare from Improve Iberica
- General Practitioner Certificate in Animal Behavior from the European School of Veterinary Postgraduate Studies
- Multi-species Behavior Modification Technician from the Bocalán Foundation- The Dog Trainers Factory

#### Eimil López, Rodrigo

- Clinical Veterinarian in A Maroza Veterinary Center in the Internal Medicine and Anesthesia Areas Head of Uronephrology and Dentistry services
- Degree in Veterinary Medicine from the USC
- Member of AVEPA

#### Dña. Ferro López, María

- Graduated in Veterinary Medicine from the Complutense University of Madrid in 1999.
- After several years of exclusive dedication to general clinic, started her active training in the field of Behavioral Medicine in 2004
- Master's Degree in Applied Clinical Etiology and Animal Welfare from the Autonomous University of Barcelona (2008) Member of the Clinical Ethology Group of AVEPA (GrETCA) and of the European Society of Veterinary Clinical Ethology (ESVCE)



An impressive teaching staff, forms by professionals from different areas of expertise, will be your teachers during your apprenticeship: a unique occasion not to be missed."





## tech 18 | Structure and Content

#### Module 1. Introduction to Emergency Medicine in Small Animals

- 1.1. Introduction to Emergency Medicine in Small Animals
  - 1.1.1. Triage and Initial Assessment
    - 1.1.1.1. Remote Triage
    - 1.1.1.2. On-site Triage
  - 1.1.2. Initial Assessment
    - 1.1.2.1. Primary Assessment
    - 1.1.2.2. Secondary Assessment
  - 1.1.3. Primary Care and Management of Emergency Patients
  - 1.1.4. Management of Difficult Canine Patient
  - 1.1.5. Management of Difficult Feline Patient
  - 1.1.6. Anesthesia and Analgesia in Emergency Patients
    - 1.1.6.1. Anesthesia in Patients with:
      - 1.1.6.1.1. Respiratory Problems
      - 1.1.6.1.2. Cardiovascular Problems
      - 1.1.6.1.3. Gastrointestinal Problems
      - 1.1.6.1.4. Neurological Alterations:
      - 1.1.6.1.5. Behavioral Alterations
      - 1.1.6.1.6. Others
    - 1.1.6.2. Analgesia in Emergency Patients
      - 11621 Pain Assessment
      - 1.1.6.2.2. Pain Treatment
  - 1.1.7. Pharmacology in Emergency Patients
    - 1.1.7.1. Fluid Therapy.
    - 1.1.7.2. Antibiotherapy
    - 1.1.7.3. Constant Rate Infusion
  - 1.1.8. Enteral Nutrition.
    - 1.1.8.1. Nasogastric Catheterization
    - 1.1.8.2. Gastroesophageal Catheterization
  - 1.1.9. Intensive Care Unit (ICU)
    - 1.1.9.1. ICU.
    - 1.1.9.2. Patient Monitoring
  - 1.1.10. Diagnostic Imaging
    - 1.1.10.1. Chest X-ray
    - 1.1.10.2. Chest Ultrasound
    - 1.1.10.3. Abdomen Radiology
    - 1.1.10.4. Abdomen Ultrasound

#### Module 2. Management of Urologic and Reproductive Emergencies

- 2.1. Management of Urologic and Reproductive Emergencies
  - 2.1.1. Clinical Management of Patient with Urologic and Reproductive Emergencies
    - 2.1.1.1. Initial Management
    - 2.1.1.2. Medical history
    - 2.1.1.3. Physical Examination
    - 2.1.1.4. Diagnostic tests
    - 2.1.1.5. Complementary Diagnostic Procedures
      - 2.1.1.5.1. Diagnostic Imaging
      - 2.1.1.5.2. Protein/ Creatinine Fraction
      - 2.1.1.5.3. Urine culture
      - 2.1.1.5.4. Diagnostic Imaging
      - 2.1.1.5.5. Test for Brucelosis
      - 2.1.1.5.6. Prostatic Aspirate
  - 2.1.2. Acute Renal Failure
    - 2.1.2.1. Aetiopathogenesis.
    - 2.1.2.2. Clinical Signs
    - 2.1.2.3. Diagnosis
    - 2.1.2.4. Treatment
  - 2.1.3. Urinary Obstruction.
    - 2.1.3.1. Canine Patient
    - 2 1 3 2 Feline Patient
  - 2.1.4. Hematuria.
    - 2.1.4.1. Aetiopathogenesis.
    - 2.1.4.2. Clinical Signs
    - 2.1.4.3. Diagnosis
    - 2.1.4.4. Treatment
  - 2.1.5. Uroabdomen
    - 2.1.5.1. Aetiopathogenesis.
    - 2.1.5.2. Clinical Signs
    - 2.1.5.3. Diagnosis
    - 2.1.5.4. Treatment
  - 2.1.6. Perineal Hernia with Bladder Entrapment
    - 2.1.6.1. Aetiopathogenesis.
    - 2.1.6.2. Clinical Signs
    - 2.1.6.3. Diagnosis
    - 2.1.6.4. Treatment

## Structure and Content | 19 tech

2.1.7.	Emergencies in NonPregnant Females
	2.1.7.1. Pyometra.

2.1.7.1.1. Aetiopathogenesis.

2.1.7.1.2. Clinical Signs

2.1.7.1.3. Diagnosis

2.1.7.1.4. Treatment

2.1.7.2. Vaginal Hyperplasia

2.1.7.2.1. Aetiopathogenesis.

2.1.7.2.2. Clinical Signs

2.1.7.2.3. Diagnosis

2.1.7.2.4. Treatment

#### 2.1.8. Emergencies in Pregnant Females

2.1.8.1. Dystocia

2.1.8.1.1. Aetiopathogenesis.

2.1.8.1.2. Clinical Signs

2.1.8.1.3. Diagnosis

2.1.8.1.4. Treatment

2.1.8.2. Gestational Toxemia

2.1.8.2.1. Aetiopathogenesis.

2.1.8.2.2. Clinical Signs

2.1.8.2.3. Diagnosis

2.1.8.2.4. Treatment

#### 2.1.9. Emergencies in Postpartum Females

2.1.9.1. Hypocalcemia

2.1.9.1.1. Aetiopathogenesis.

2.1.9.1.2. Clinical Signs

2.1.9.1.3. Diagnosis

2.1.9.1.4. Treatment

2.1.9.2. Metritis

2.1.9.2.1. Aetiopathogenesis.

2.1.9.2.2. Clinical Signs

2.1.9.2.3. Diagnosis

2.1.9.2.4. Treatment

#### 2.1.9.3. Uterine Prolapse

2.1.9.3.1. Aetiopathogenesis.

2.1.9.3.2. Clinical Signs

2.1.9.3.3. Diagnosis

2.1.9.3.4. Treatment

#### 2.1.9.4. Mastitis

2.1.9.4.1. Aetiopathogenesis.

2.1.9.4.2. Clinical Signs

2.1.9.4.3. Diagnosis

2.1.9.4.4. Treatment

2.1.9.5. Pediatric Emergencies

#### 2.1.10. Reproductive Emergencies in Males

#### 2.1.10.1. Paraphimosis

2.1.10.1.1. Aetiopathogenesis.

2.1.10.1.2. Clinical Signs

2.1.10.1.3. Diagnosis

2.1.10.1.4. Treatment

#### 2.1.10.2. Acute Prostatitis

2.1.10.2.1. Aetiopathogenesis.

2.1.10.2.2. Clinical Signs

2.1.10.2.3. Diagnosis

2.1.10.2.4. Treatment

#### 2.1.10.3. Urethral Prolapse

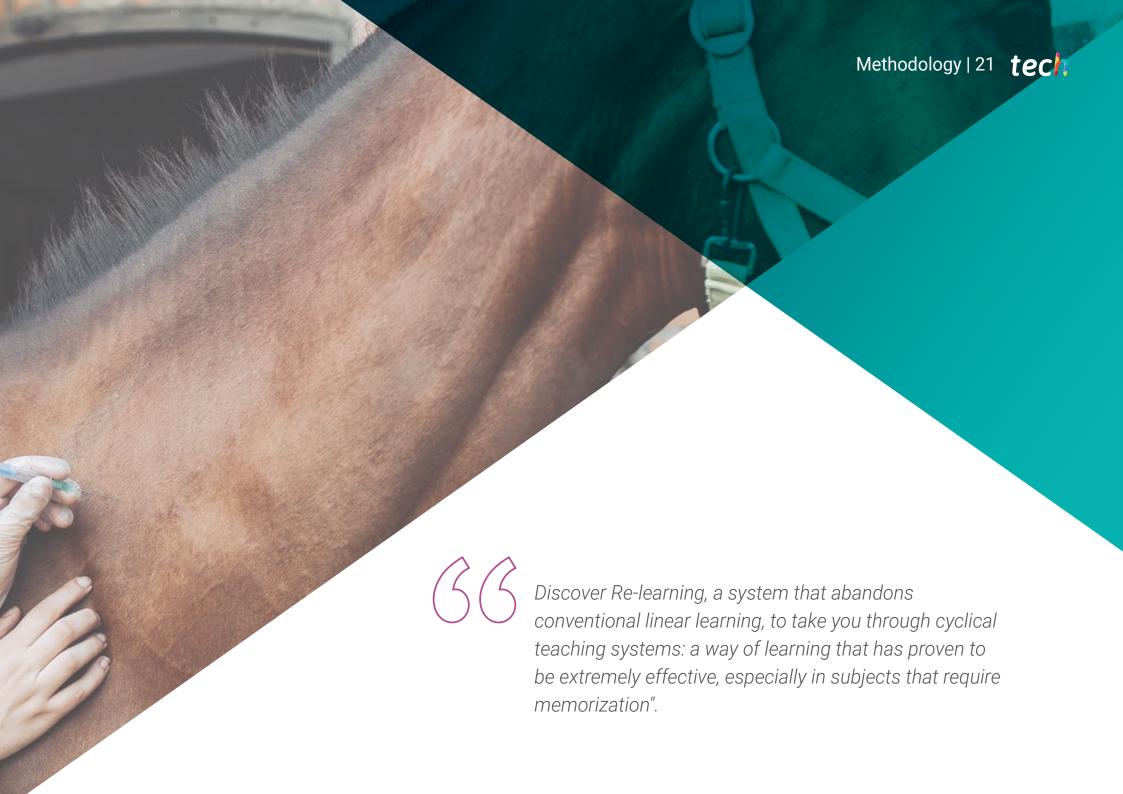
2.1.10.3.1. Aetiopathogenesis.

2.1.10.3.2. Clinical Signs

2.1.10.3.3. Diagnosis

2.1.10.3.4. Treatment



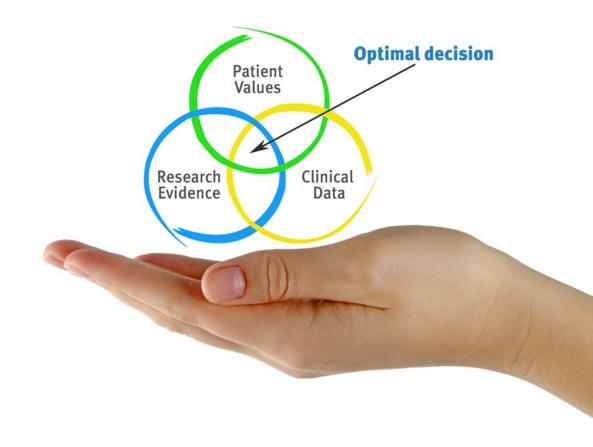


## tech 22 | Methodology

#### At TECH we use the Case Method

In a given clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case be based on current professional life, trying to recreate the real conditions in the Veterinarian's Professional Practice.



Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.

#### The effectiveness of the method is justified by four fundamental achievements:

- 1. Veterinarians who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
- 2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.





#### Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



### Metodology | 25 tech

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 65,000 veterinarians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

## tech 26 | Methodology

In this program you will have access to the best educational material, prepared with you in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### **Latest Techniques and Procedures on Video**

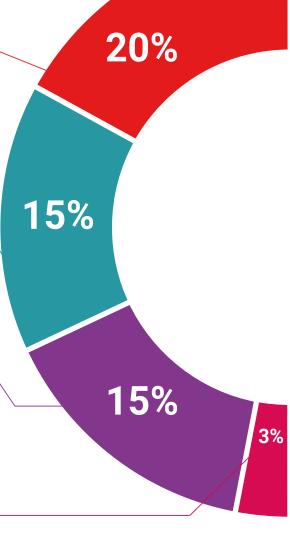
We bring you closer to the latest Techniques, to the latest Educational Advances, to the forefront of current Veterinary Techniques and Procedures. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **Interactive Summaries**

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

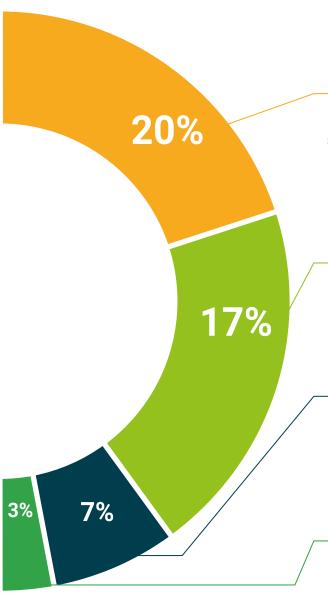
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.



#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.





#### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







## tech 30 | Certificate

This Postgraduate Certificate in Management of Urology and Reproductive **Emergencies in Small Animals** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Certificate issued by TECH - Technological University via tracked delivery.

The certificate issued by **TECH - Technological University** will express the qualification obtained in the Postgraduate Certificate, and will meet the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in Management of Urology and Reproductive Emergencies in Small Animals

Official Number of Hours: 300 hours.



#### POSTGRADUATE CERTIFICATE

#### Management of Urology and Reproductive Emergencies in Small Animals

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as

of June 28, 2018 Tere Guevara Navarro

<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health

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technological
university

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